

What is claimed is:

1. A method for conducting a financial transaction comprising:  
establishing communication between a vehicle-accessed, payment-gateway  
terminal (VAPGT) and a pre-registered, key-enabled, personal transaction  
device (PTD);  
accessing the PTD using a privacy card;  
transmitting a transaction request to a server; and  
receiving a transaction authorization message from the server to complete the  
transaction.
2. The method of claim 1 wherein the privacy card is a biometric control device.
3. The method of claim 1 further comprising:  
initiating communication with the VAPGT by the PTD.
4. The method of claim 1 further comprising:  
initiating communication with the PTD by the VAPGT.
5. The method of claim 1 further comprising:  
registering the PTD with an appropriate enabling authority, the PTD is associated  
with a particular user.
6. The method of claim 5 wherein the appropriate enabling authority is selected  
from the group consisting of a financial institution, a third-party distributor, and a  
credit card issuer.
7. The method of claim 1 further comprising:  
generating a transaction key; and  
transmitting the transaction key to the VAPGT.
8. The method of claim 7 further comprising:  
combining the transaction key together with a transaction amount and a VAPGT  
identifier to generate the transaction request.

9. The method of claim 8 further comprising:  
determining if the transaction is valid; and  
if the transaction is valid,  
selecting a pre-existing account of a plurality of accounts associated with  
the transaction key,  
negotiating with a financial processor to authorize the transaction, and  
deducting the transaction amount from the pre-existing account.
10. The method of claim 9 wherein determining if the transaction is valid further  
comprises:  
comparing a current transaction type against historical transaction events and  
pre-established certificates.
11. The method of claim 10 further comprising:  
validating the transaction key against existing user keys.
12. The method of claim 9 wherein determining if the transaction is valid further  
comprises:  
comparing a current transaction type against fraud detection systems.
13. The method of claim 9 further comprising:  
if the transaction is not valid,  
transmitting an invalid transaction message to the VAPGT,  
notifying appropriate authorities of the invalid transaction, and  
disabling the PTD.
14. The method of claim 1 wherein the server is remotely connected to the  
VAPGT and PTD.
15. The method of claim 1 wherein the PTD and VAPGT communicate via a  
wireless connection.
16. The method of claim 1 wherein the PTD is a PKI-enabled PTD.

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17. The method of claim 1 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
18. A method for conducting a financial transaction comprising:  
5 establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and a pre-registered, key-enabled, personal transaction device (PTD);  
accessing the PTD using a privacy card; and  
transmitting a transaction key to the VAPGT.
- 10 19. The method of claim 18 wherein the privacy card is a biometric control device.
20. The method of claim 18 further comprising:  
initiating communication with the VAPGT by the PTD.
21. The method of claim 18 further comprising:  
initiating communication with the PTD by the VAPGT.
- 15 22. The method of claim 18 further comprising:  
registering the PTD with an appropriate enabling authority, the PTD is associated with a particular user.
23. The method of claim 22 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.
- 20 24. The method of claim 18 further comprising:  
generating a transaction key.
25. The method of claim 18 further comprising:  
receiving an invalid transaction message; and  
25 disabling the PTD.

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- 26. The method of claim 18 wherein the PTD and VAPGT communicate via a wireless connection.
- 27. The method of claim 18 wherein the PTD is a PKI-enabled PTD.
- 28. The method of claim 18 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
- 29. A method for conducting a financial transaction comprising:
  - establishing communication between a pre-registered, key-enabled, personal transaction device (PTD) and a vehicle-accessed, payment-gateway terminal (VAPGT);
  - receiving a transaction key from the PTD;
  - transmitting a transaction request to a server; and
  - receiving a transaction authorization message from the server.
- 30. The method of claim 29 further comprising:
  - initiating communication with the VAPGT by the PTD.
- 31. The method of claim 29 further comprising:
  - initiating communication with the PTD by the VAPGT.
- 32. The method of claim 29 further comprising:
  - combining the transaction key together with a transaction amount and a VAPGT identifier to generate the transaction request.
- 33. The method of claim 29 further comprising:
  - receiving an invalid transaction message;
  - notifying appropriate authorities of the invalid transaction; and
  - disabling the PTD.
- 34. The method of claim 29 wherein the server is remotely connected to the VAPGT and PTD.

35. The method of claim 29 wherein the PTD and VAPGT communicate via a wireless connection.
36. The method of claim 29 wherein the PTD is a PKI-enabled PTD.
37. The method of claim 29 wherein the VAPGT is selected from the group  
5 consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
38. A method for conducting a financial transaction comprising:  
receiving, at a server, a biometric-controlled, key-enabled, transaction request  
from a vehicle-accessed, payment-gateway terminal (VAPGT);  
10 determining if the transaction is valid; and  
if the transaction is valid,  
negotiating with a financial processor to authorize the transaction, and  
transmitting a transaction authorization message to the VAPGT.
39. The method of claim 38 further comprising:  
15 if the transaction is valid,  
selecting a pre-existing account of a plurality of accounts associated with  
the transaction request.
40. The method of claim 38 wherein determining if the transaction is valid further  
comprises:  
20 comparing a current transaction type against historical transaction events and  
pre-established certificates.
41. The method of claim 40 further comprising:  
validating a transaction key against existing user keys.
42. The method of claim 38 wherein determining if the transaction is valid further  
25 comprises:  
comparing a current transaction type against fraud detection systems.
43. The method of claim 38 further comprising:

if the transaction is not valid,  
transmitting an invalid transaction message to the VAPGT,  
notifying appropriate authorities of the invalid transaction, and  
disabling the PTD.

- 5 44. The method of claim 38 wherein the server is remotely connected to the  
VAPGT and PTD.
45. The method of claim 38 wherein the VAPGT is selected from the group  
consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification  
station.
- 10 46. A method for conducting a financial transaction comprising:  
15 registering a key-enabled, personal transaction device (PTD) with an appropriate  
enabling authority, the PTD is uniquely identified with a particular user;  
establishing communication between a vehicle-accessed, payment-gateway  
terminal (VAPGT) and the PTD;  
20 transmitting a payment request to the PTD;  
accessing the PTD using a privacy card;  
generating a transaction key;  
transmitting the transaction key to the VAPGT;  
generating a transaction request;  
25 transmitting the transaction request to a server;  
determining if the transaction is valid;  
if the transaction is valid,  
selecting a pre-existing account of a plurality of accounts associated with  
the transaction key,  
30 negotiating with a financial processor to authorize the transaction,  
deducting the transaction amount from the pre-existing account,  
transmitting a transaction authorization message to the VAPGT to  
complete the transaction; and  
if the transaction is not valid,  
transmitting an invalid transaction message to the VAPGT,  
notifying appropriate authorities of the invalid transaction, and

disabling the PTD.

47. The method of claim 46 wherein the privacy card is a biometric control device.

48. The method of claim 46 further comprising:  
initiating communication with the VAPGT by the PTD.

49. The method of claim 46 further comprising:  
initiating communication with the PTD by the VAPGT.

50. The method of claim 46 wherein determining if the transaction is valid further comprises:  
comparing a current transaction type against historical transaction events and pre-established certificates.

51. The method of claim 50 further comprising:  
validating the transaction key against existing user keys.

52. The method of claim 51 wherein determining if the transaction is valid further comprises:  
comparing a current transaction type against fraud detection systems.

53. The method of claim 46 wherein generating a transaction request further comprises:  
combining the transaction key together with a transaction amount and a VAPGT identifier.

54. The method of claim 46 wherein the server is remotely connected to the VAPGT and PTD.

55. The method of claim 46 wherein the PTD and VAPGT communicate via a wireless connection.

56. The method of claim 46 wherein the PTD is a PKI-enabled PTD.

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57. The method of claim 46 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
58. The method of claim 46 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.
59. A method for conducting a financial transaction comprising:  
loading a pre-registered, key-enabled, personal transaction device (PTD) with a pre-funded cash account;  
establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and the PTD;  
accessing the PTD using a privacy card; and  
deducting a transaction amount from the pre-funded cash account to complete the transaction.
60. The method of claim 59 wherein the privacy card is a biometric control device.
61. The method of claim 59 further comprising:  
initiating communication with the VAPGT by the PTD.
62. The method of claim 59 further comprising:  
initiating communication with the PTD by the VAPGT.
63. The method of claim 59 further comprising:  
registering the PTD with an appropriate enabling authority, the PTD is associated with a particular user.
64. The method of claim 63 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.
65. The method of claim 59 wherein the PTD and VAPGT communicate via a wireless connection.



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- 66. The method of claim 59 wherein the PTD is a PKI-enabled PTD.
- 67. The method of claim 59 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
- 5 68. A method for conducting a financial transaction comprising:  
establishing communication between a pre-registered, key-enabled, personal transaction device (PTD) including a pre-loaded, pre-funded cash account and a vehicle-accessed, payment-gateway terminal (VAPGT); and  
receiving a transaction authorization message from the PTD to complete the transaction.
- 69. The method of claim 68 further comprising:  
initiating communication with the VAPGT by the PTD.
- 70. The method of claim 68 further comprising:  
initiating communication with the PTD by the VAPGT.
- 15 71. The method of claim 68 wherein the PTD and VAPGT communicate via a wireless connection.
- 72. The method of claim 68 wherein the PTD is a PKI-enabled PTD.
- 73. The method of claim 68 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
- 20 74. The method of claim 68 further comprising:  
if the transaction is not valid,  
notifying appropriate authorities of the invalid transaction, and  
disabling the PTD.
- 25 75. A method for conducting a financial transaction comprising:

establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and a key-enabled, personal transaction device (PTD); accessing the PTD using a privacy card; and transmitting a transaction authorization message to the VAPGT to complete the transaction.

76. The method of claim 75 wherein the privacy card is a biometric control device.

77. The method of claim 75 further comprising:  
initiating communication with the VAPGT by the PTD.

78. The method of claim 75 further comprising:  
initiating communication with the PTD by the VAPGT.

79. The method of claim 75 further comprising:  
registering the PTD with an appropriate enabling authority, the PTD is associated with a particular user.

80. The method of claim 79 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.

81. The method of claim 75 wherein the PTD and VAPGT communicate via a wireless connection.

82. The method of claim 75 wherein the PTD is a PKI-enabled PTD.

83. The method of claim 75 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.

84. The method of claim 75 further comprising:  
determining if the transaction is valid.

85. The method of claim 84 further comprising:

if the transaction is valid,  
deducting a transaction amount from the pre-funded cash account.

86. The method of claim 84 further comprising:

if the transaction is not valid,

5 transmitting an invalid transaction message to the VAPGT,  
notifying appropriate authorities of the invalid transaction, and  
disabling the PTD.

87. A method for conducting a financial transaction comprising:

10 registering a key-enabled, personal transaction device (PTD) with an appropriate  
enabling authority, the PTD is uniquely identified with a particular user;

loading the PTD with a pre-funded cash account;

establishing communication between a vehicle-accessed, payment-gateway  
terminal (VAPGT) and the PTD;

accessing the PTD using a privacy card;

15 transmitting a transaction request to the PTD;

determining if the transaction is valid;

if the transaction is valid,

deducting a transaction amount from the pre-funded cash account, and

transmitting a transaction authorization message to the VAPGT to

20 complete the transaction; and

if the transaction is not valid,

transmitting an invalid transaction message to the VAPGT,

notifying appropriate authorities of the invalid transaction, and

disabling the PTD.

25 88. The method of claim 87 wherein the privacy card is a biometric control device.

89. The method of claim 87 further comprising:

initiating communication with the VAPGT by the PTD.

90. The method of claim 87 further comprising:

initiating communication with the PTD by the VAPGT.

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91. The method of claim 87 wherein the PTD and VAPGT communicate via a wireless connection.
92. The method of claim 87 wherein the PTD is a PKI-enabled PTD.
93. The method of claim 87 wherein the VAPGT is selected from the group consisting of a tollbooth, a vehicular kiosk, a ticket booth, and a smog certification station.
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94. The method of claim 87 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.
95. A system to conduct a financial transaction comprising:  
a vehicle-accessed, payment-gateway terminal (VAPGT);  
a pre-registered, key-enabled, personal transaction device (PTD) in proximity to the VAPGT;  
a privacy card connected to the PTD to access the PTD;  
a server to receive a transaction request and to send a transaction authorization message to the VAPGT, wherein the VAPGT and PTD complete the transaction upon receipt of the transaction authorization message.
96. The system of claim 95 wherein the privacy card is a biometric control device.
97. The system of claim 95 wherein the PTD initiates communication with the VAPGT.
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98. The system of claim 95 wherein the VAPGT initiates communication with the PTD.
99. The system of claim 95 wherein the PTD is registered with an appropriate enabling authority, the PTD is associated with a particular user.

100. The system of claim 99 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.

101. The system of claim 95 wherein the PTD generates a transaction key and transmits the key to the VAPGT.

102. The system of claim 101 wherein the VAPGT combines the transaction key together with a transaction amount and a VAPGT identifier to generate the transaction request.

103. The system of claim 95 wherein the server determines if the transaction is valid, and if the transaction is valid, selects a pre-existing account of a plurality of accounts associated with a transaction key, negotiates with a financial processor to authorize the transaction, and deducts a transaction amount from the pre-existing account.

104. The system of claim 103 wherein the server further compares a current transaction type against historical transaction events and pre-established certificates.

105. The system of claim 104 wherein the server further validates the transaction key against existing user keys.

106. The system of claim 103 wherein the server further compares a current transaction type against fraud detection systems.

107. The system of claim 103 wherein, if the transaction is not valid, the server transmits an invalid transaction message to the VAPGT, notifies appropriate authorities of the invalid transaction, and disables the PTD.

108. The system of claim 95 wherein the server is remotely connected to the VAPGT and PTD.



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- 119. The system of claim 112 wherein the appropriate enabling authority is selected from the group consisting of a financial institution, a third-party distributor, and a credit card issuer.
- 5 120. A system for conducting a financial transaction comprising:
  - means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and a pre-registered, key-enabled, personal transaction device (PTD);
  - means for accessing the PTD using a privacy card;
  - means for transmitting a transaction request to a server; and
  - 10 means for receiving a transaction authorization message from the server to complete the transaction.
- 15 121. A system for conducting a financial transaction comprising:
  - means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and a pre-registered, key-enabled, personal transaction device (PTD);
  - means for accessing the PTD using a privacy card; and
  - means for transmitting a transaction key to the VAPGT.
- 20 122. A system for conducting a financial transaction comprising:
  - means for establishing communication between a pre-registered, key-enabled, personal transaction device (PTD) and a vehicle-accessed, payment-gateway terminal (VAPGT);
  - means for receiving a transaction key from the PTD;
  - means for transmitting a transaction request to a server; and
  - means for receiving a transaction authorization message from the server.
- 25 123. A system for conducting a financial transaction comprising:
  - means for receiving, at a server, a biometric-controlled, key-enabled, transaction request from a vehicle-accessed, payment-gateway terminal (VAPGT);
  - means for determining if the transaction is valid; and
  - if the transaction is valid,

means for negotiating with a financial processor to authorize the transaction, and  
means for transmitting a transaction authorization message to the VAPGT.

124. A system for conducting a financial transaction comprising:

means for registering a key-enabled, personal transaction device (PTD) with an appropriate enabling authority, the PTD is uniquely identified with a particular user;

means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and the PTD;

means for transmitting a payment request to the PTD;

means for accessing the PTD using a privacy card;

means for generating a transaction key;

means for transmitting the transaction key to the VAPGT;

means for generating a transaction request;

means for transmitting the transaction request to a server;

means for determining if the transaction is valid;

if the transaction is valid,

means for selecting a pre-existing account of a plurality of accounts associated with the transaction key,

means for negotiating with a financial processor to authorize the transaction,

means for deducting the transaction amount from the pre-existing account,

means for transmitting a transaction authorization message to the VAPGT to complete the transaction; and

if the transaction is not valid,

means for transmitting an invalid transaction message to the VAPGT,

means for notifying appropriate authorities of the invalid transaction, and

means for disabling the PTD.

125. A system for conducting a financial transaction comprising:

means for loading a pre-registered, key-enabled, personal transaction device (PTD) with a pre-funded cash account;



means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and the PTD;

means for accessing the PTD using a privacy card; and

means for deducting a transaction amount from the pre-funded cash account to complete the transaction.

126. A system for conducting a financial transaction comprising:

means for establishing communication between a pre-registered, key-enabled, personal transaction device (PTD) including a pre-loaded, pre-funded cash account and a vehicle-accessed, payment-gateway terminal (VAPGT); and

means for receiving a transaction authorization message from the PTD to complete the transaction.

127. A system for conducting a financial transaction comprising:

means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and a key-enabled, personal transaction device (PTD);

means for accessing the PTD using a privacy card; and

means for transmitting a transaction authorization message to the VAPGT to complete the transaction.

128. A system for conducting a financial transaction comprising:

means for registering a key-enabled, personal transaction device (PTD) with an appropriate enabling authority, the PTD is uniquely identified with a particular user;

means for loading the PTD with a pre-funded cash account;

means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and the PTD;

means for accessing the PTD using a privacy card;

means for transmitting a transaction request to the PTD;

means for determining if the transaction is valid;

if the transaction is valid,

means for deducting a transaction amount from the pre-funded cash account, and

means for transmitting a transaction authorization message to the VAPGT  
to complete the transaction; and

if the transaction is not valid,

means for transmitting an invalid transaction message to the VAPGT,

means for notifying appropriate authorities of the invalid transaction, and

means for disabling the PTD.

129. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

establishing communication between a vehicle-accessed, payment-gateway  
terminal (VAPGT) and a pre-registered, key-enabled, personal transaction  
device (PTD);

accessing the PTD using a privacy card;

transmitting a transaction request to a server; and

receiving a transaction authorization message from the server to complete the  
transaction.

130. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

means for establishing communication between a vehicle-accessed, payment-  
gateway terminal (VAPGT) and a pre-registered, key-enabled, personal  
transaction device (PTD);

means for accessing the PTD using a privacy card; and

means for transmitting a transaction key to the VAPGT.

131. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

means for establishing communication between a pre-registered, key-enabled,  
personal transaction device (PTD) and a vehicle-accessed, payment-gateway  
terminal (VAPGT);

means for receiving a transaction key from the PTD;

means for transmitting a transaction request to a server; and  
means for receiving a transaction authorization message from the server.

132. A computer readable medium comprising instructions, which when executed on a processor, perform a method for conducting a financial transaction, the system comprising:

means for receiving, at a server, a biometric-controlled, key-enabled, transaction request from a vehicle-accessed, payment-gateway terminal (VAPGT);

means for determining if the transaction is valid; and

if the transaction is valid,

means for negotiating with a financial processor to authorize the transaction, and

means for transmitting a transaction authorization message to the VAPGT.

133. A computer readable medium comprising instructions, which when executed on a processor, perform a method for conducting a financial transaction, the system comprising:

means for registering a key-enabled, personal transaction device (PTD) with an appropriate enabling authority, the PTD is uniquely identified with a particular user;

means for establishing communication between a vehicle-accessed, payment-gateway terminal (VAPGT) and the PTD;

means for transmitting a payment request to the PTD;

means for accessing the PTD using a privacy card;

means for generating a transaction key;

means for transmitting the transaction key to the VAPGT;

means for generating a transaction request;

means for transmitting the transaction request to a server;

means for determining if the transaction is valid;

if the transaction is valid,

means for selecting a pre-existing account of a plurality of accounts associated with the transaction key,

means for negotiating with a financial processor to authorize the transaction,

means for deducting the transaction amount from the pre-existing account,  
means for transmitting a transaction authorization message to the VAPGT  
to complete the transaction; and

if the transaction is not valid,

means for transmitting an invalid transaction message to the VAPGT,  
means for notifying appropriate authorities of the invalid transaction, and  
means for disabling the PTD.

134. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

means for loading a pre-registered, key-enabled, personal transaction device  
(PTD) with a pre-funded cash account;

means for establishing communication between a vehicle-accessed, payment-  
gateway terminal (VAPGT) and the PTD;

means for accessing the PTD using a privacy card; and

means for deducting a transaction amount from the pre-funded cash account to  
complete the transaction.

135. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

means for establishing communication between a pre-registered, key-enabled,  
personal transaction device (PTD) including a pre-loaded, pre-funded cash  
account and a vehicle-accessed, payment-gateway terminal (VAPGT); and

means for receiving a transaction authorization message from the PTD to  
complete the transaction.

136. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

means for establishing communication between a vehicle-accessed, payment-  
gateway terminal (VAPGT) and a key-enabled, personal transaction device  
(PTD);

means for accessing the PTD using a privacy card; and  
means for transmitting a transaction authorization message to the VAPGT to  
complete the transaction.

137. A computer readable medium comprising instructions, which when executed  
on a processor, perform a method for conducting a financial transaction, the  
system comprising:

means for registering a key-enabled, personal transaction device (PTD) with an  
appropriate enabling authority, the PTD is uniquely identified with a particular  
user;

means for loading the PTD with a pre-funded cash account;

means for establishing communication between a vehicle-accessed, payment-  
gateway terminal (VAPGT) and the PTD;

means for accessing the PTD using a privacy card;

means for transmitting a transaction request to the PTD;

means for determining if the transaction is valid;

if the transaction is valid,

means for deducting a transaction amount from the pre-funded cash  
account, and

means for transmitting a transaction authorization message to the VAPGT  
to complete the transaction; and

if the transaction is not valid,

means for transmitting an invalid transaction message to the VAPGT,

means for notifying appropriate authorities of the invalid transaction, and

means for disabling the PTD.